



December 5, 2011

EPA Region 10
Investigations and Engineering Unit (OEA-95)
1200 Sixth Avenue
Seattle WA 98101
Attn: Michele Wright

RE: Emerald Services, Inc.
Summary Report - PCB Contamination and De-Contamination
Blaser Die Casting

Dear Ms. Wright;

This report is being provided in order to summarize the management of PCB-contaminated used oil received by Emerald Services, Inc.'s Seattle facility from Blaser Die Casting. This information is supplemental to that provided in the Unmanifested Waste Report (Report) dated October 19, 2011.

The Emerald facility located at 1500 Airport Way South in Seattle, Washington (Emerald), received a shipment of used oil contaminated with polychlorinated biphenyls (PCBs) on September 27, 2011. The contamination was discovered upon routine PCB testing of bulked oil at the Emerald facility.

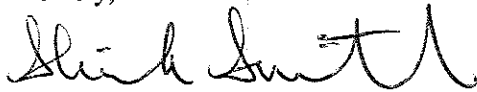
Screening by the Emerald laboratory showed PCB Arochlor 1254 in an Emerald storage tank of consolidated used oil (LS-1). By screening truck retain samples from each shipment of used oil consolidated into the tank, Emerald was able to trace the PCB contamination to a shipment from Blaser Die Casting, 5700 3rd Ave S., Seattle WA 98108. Two of the follow-up PCB samples collected from the Blaser Die Casting drums on September 30, 2011 also contained PCB Arochlor 1254.

The Blaser Die Casting retain sample collected by Emerald prior to the used oil pick-up on September 27, 2011, as well as the samples collected from the Blaser Die Casting drums on September 30, 2011 were then shipped to Spectra Laboratories for third-party PCB analysis (see Spectra lab reports, Client IDs 110929.0A-8 and 10364-4). Spectra reported results of 1,340mg/kg PCB Arochlor 1254 for the September 27, 2011 Blaser Die Casting retain sample, and 1,280 and 28.4mg/kg PCB Arochlor 1254 for the samples collected from Blaser Die Casting on September 30, 2011.

Once transportation and proper disposal were arranged, Emerald pumped the contaminated used oil out of the storage tank to a tanker truck. Contaminated equipment was washed with water and the storage tank (LS-1) was decontaminated with diesel per the enclosed PCB Tank Decontamination and Sampling Plan. The 22,895 kg of TSCA-contaminated used oil, inclusive of rinseates, was then transported to Clean Harbors on manifest #004391191FLE, leaving the Emerald facility on October 17, 2011. A copy of the manifest used for shipment is attached.

If you have any questions regarding this report, or need additional information, please feel free to contact me at the numbers below.

Sincerely,



Sheila Smith, Environmental Coordinator
Emerald Services, Inc.
(206) 832-3204 (Office)
(253) 370-7912 (Cell)
(206) 832-3304 (fax)
sheilas@emeraldnw.com

cc: Facility Operating Record

Enclosures: Spectra Laboratories Analytical Reports, Client IDs 110929.0A-8, 10364-4, and 10365-12
Emerald PCB Tank Decontamination and Sample Plan
Emerald LS-1 Swabs Analysis Report Lab ID # 111018-0L
Manifest #004391191FLE with Certificate of Disposal



SPECTRA Laboratories

2221 Ross Way • Tacoma, WA 98421 • (253) 272-4850 • Fax (253) 572-9838 • www.spectra-lab.com

10/03/2011

Emerald Services, Inc.
7343 E. Marginal Way S.
Seattle, WA 98108

P.O.#: ***
Project: Blaster Die Casting
Client ID: 110929.0A-8
Sample Matrix: Oil
Date Sampled: 09/27/2011
Date Received: 09/30/2011
Spectra Project: 2011090680
Spectra Number: 1
Rush

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>Method</u>
PCB AR1254	1340	mg/Kg	SW846 8082A

*Surrogate diluted out of sample.

<u>Surrogate</u>	<u>Recovery</u>	<u>Method</u>
Decachlorobiphenyl	0*	SW846 8082A

SPECTRA LABORATORIES



Steve Hibbs, Laboratory Manager

a6/jjb

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10/05/2011

Emerald Services, Inc.
7343 E. Marginal Way S.
Seattle, WA 98108

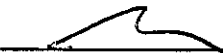
P.O.#: ER-21511
Project: Blaser Die Casting
Client ID: 10364-4
Sample Matrix: Oil
Date Sampled: 09/30/2011
Date Received: 10/04/2011
Spectra Project: 2011100094
Spectra Number: 1
Rush

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>Method</u>
PCB AR1254	1280	mg/Kg	SW846 8082A

*Surrogate diluted out of sample.

<u>Surrogate</u>	<u>Recovery</u>	<u>Method</u>
Decachlorobiphenyl	0*	SW846 8082A

SPECTRA LABORATORIES



Steve Hibbs, Laboratory Manager
a6/jjb

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10/05/2011

Emerald Services, Inc.
7343 E. Marginal Way S.
Seattle, WA 98108

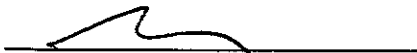
P.O.#: ER-21511
Project: Blaser Die Casting
Client ID: 10365-12
Sample Matrix: Oil
Date Sampled: 09/30/2011
Date Received: 10/04/2011
Spectra Project: 2011100094
Spectra Number: 2
Rush

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>Method</u>
PCB AR1254	28.4	mg/Kg	SW846 8082A

*Surrogate diluted out of sample.

<u>Surrogate</u>	<u>Recovery</u>	<u>Method</u>
Decachlorobiphenyl	0*	SW846 8082A

SPECTRA LABORATORIES



Steve Hibbs, Laboratory Manager
a6/ijb

CHAIN of CUSTODY

SPECTRA Laboratories

PAGE 1 of 1

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STANDARD ☐

RUSH ☒

CLIENT: Emerald Recycling- Seattle ADDRESS: 1500 Airport Way South

PROJECT: Blaser Die Casting

CONTACT: Leslie Embrey

PHONE: 206-832-3093 FAX: 206-832-3155

e-MAIL: lesliee@emeraldncw.com Prefer FAX ☒ or e-MAIL ☒

PURCHASE ORDER # ER-21511

NUMBER OF CONTAINERS

DATE SAMPLED

TIME SAMPLED

MATRIX

1 10364-4 09/30/11 na oil 1

2 10365-12 09/30/11 na oil 1

3

4

5

6

7

8

9

0

HYDROCARBONS

8260/624 VOA

8270/625 SEMI VOA

8270 PAH/PNA

8082/608 PCB

Amenable Cyanide

TOTAL METALS RCRA 8

TOTAL METALS (SPECIFY)

TCLP METALS RCRA 8

TCLP METALS (SPECIFY)

As, Cd, Cr, Pb

PH 9040/9045

TX/TOX 9076

TURBIDITY

FLASH POINT

BOD

SOLIDS (SPECIFY)

Grain Size (Subcontract)

Formaldehyde

Percent Ethanol by GC

Benzene

FLUSTRATED SOLVENTS

METALS

OTHER

ADDRESS CHANGE ☐

SPECIAL INSTRUCTIONS/COMMENTS:

HIGH CONCENTRATION PCB'S!!!

In 10364-4 sample

moderate level in 10365-12

RELINQUISHED BY

RECEIVED BY

RELINQUISHED BY

RECEIVED BY

SIGNATURE

PRINTED NAME

COMPANY

DATE

TIME

Leslie Embrey

A. D. Merchant

A. D. Merchant

Kanda I. Ross

Emerald Recycling

E. S. I.

E. S. I.

Spectra

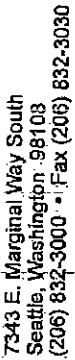
10/04/11

800am

Payment Terms: Net 30 days. Past due accounts subject to 1 1/2 % per month interest. Customer agrees to pay all costs of collection including reasonable attorney's fees and all other costs of collection regardless of whether suit is filed in Pierce Co., WA venue. Spectra Analytical, Inc. (Shipping Fee Applies)

RETURN SAMPLES ☐

DISPOSE SAMPLES ☒



PCB TANK DECONTAMINATION AND SAMPLE PLAN

This PCB Tank Decontamination and Sample Plan (Plan) outlines the steps to be taken when decontaminating a tank that has contained TSCA contaminated oil. It may also be used to decontaminate a tank containing lower levels of PCB contamination. However, that level of decontamination is generally not necessary unless the PCB contamination was due to a TSCA PCB source.

The first step of decontamination is a thorough rinsing/flushing of the tank with diesel fuel (kerosene may also be used). The tank must be rinsed a minimum of three times. Each rinse must use a volume of diesel equivalent to approximately 10 percent of the container capacity.

Following the tank rinsing, swab samples must be taken of the tank interior and inlet and outlet piping. The attached diagram shows a typical tank shape. For swab sampling, the tank is divided into six sections: north wall, south wall, east wall, west wall, floor, and ceiling. For each section, a template of approximately 10cm x 10cm grid is used to identify sample locations. Take inlet/outlet swabs in a circular sweep of the tube. A gauze pad treated with hexane is used for swiping each point within the sample grid. Each swipe taken within a section is composited for PCB analysis. A total of 6 composite samples will be needed. However this number will increase to include any inlet and outlet piping.

The tank is considered to be decontaminated if all swipe sample results are below $10\mu\text{g}/100\text{cm}^2$. If any results are above $10\mu\text{g}/100\text{cm}^2$, the tank must be rinsed and re-swiped until all results are below the $10\mu\text{g}/100\text{cm}^2$ limit.

**Drum Testing:**

Lab ID#

111018-0 L

Date: _____

Type of drum: ☐ Gas/mixed fuel☐ Drum Jail☒ LSI SwabsTEST FOR: ☐ Lead☐ Chlor-d-lect 4000☐ Benzene☒ PCB'S

Identification

1) Drum Number:

BOL Number:

Result:

Generator name:

North wall

<10 ug/100cm²

2) Drum Number:

BOL Number:

Result:

Generator name:

South wall

<10 ug/100cm²

3) Drum Number:

BOL Number:

Result:

Generator name:

East wall

<10 ug/100cm²

4) Drum Number:

BOL Number:

Result:

Generator name:

West wall

<10 ug/100cm²

5) Drum Number:

BOL Number:

Result:

Generator name:

Top

<10 ug/100cm²

6) Drum Number:

BOL Number:

Result:

Generator name:

Bottom

<10 ug/100cm²

7) Drum Number:

BOL Number:

Result:

Generator name:

8) Drum Number:

BOL Number:

Result:

Generator name:

9) Drum Number:

BOL Number:

Result:

Generator name:

10) Drum Number:

BOL Number:

Result:

Generator name:

Analyst: L. Embrey

Date:

10/18/11

Notes:

9298131

Confirmation # 56448

56448

Please print or type. (Form designed for use on elita (12-pitch) typewriter.)

004391191FLE

Contract# 7619 Form Approved, OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator ID Number WAD058367152		2. Page 1 of 1		3. Emergency Response Phone 1-800-424-9300		4. Manifest Tracking Number 004391191 FLE			
5. Generator's Name and Mailing Address EMERALD SERVICES INC - AIRPORT W 7343 E MARGINAL WAY SOUTH SEATTLE, WA 98108 Generator's Phone: (206) 832-3000						Generator's Site Address (if different than mailing address) EMERALD SERVICES INC - AIRPORT WAY 1500 AIRPORT WAY S SEATTLE, WA 98134					
6. Transporter 1 Company Name EMERALD SERVICES, INC.						U.S. EPA ID Number WAD058364647					
7. Transporter 2 Company Name						U.S. EPA ID Number					
8. Designated Facility Name and Site Address CLEAN HARBORS (ARAGONITE), LLC 11600 N. APTUS ROAD, EXIT 56 ARAGONITE, UT 84029 Facility's Phone: (435) 884-8100						U.S. EPA ID Number UTD981552177					
GENERATOR	9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))				10. Containers		11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes	
		RQ, NA3082, Hazardous waste, liquid, 1.0.5. (LEAD, POLYCHLORINATED BIPHENYLS), 9, PG-III, RQ=1, ERG#171				No.	Type	22895	K	0008, TSCA	
14. Special Handling Instructions and Additional Information 1) CH144002B USED OIL CONTAMINATED WITH PCB'S >500 PPM						REPORT ANY "RQ" DISCHARGE TO NATIONAL RESPONSE CENTER 800-424-8802, AND 911 EMERGENCY NUMBER OR LOCAL OPERATOR. GENERATOR CONTACT: HARRY UMBINETTI (206) 832-3000					
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR-262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.											
Generator's/Officer's Printed/Typed Name William K Denike						Signature 		Month Day Year 10/17/11			
TRANSPORTER	16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S.						Port of entry/exit: Date leaving U.S.:				
	17. Transporter Acknowledgment of Receipt of Materials Transporter 1 Printed/Typed Name Tim Simon						Signature 		Month Day Year 10/17/11		
DESIGNATED FACILITY	Transporter 2 Printed/Typed Name						Signature		Month Day Year		
	18. Discrepancy										
	18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection										
	18b. Alternate Facility (or Generator) Manifest Reference Number: U.S. EPA ID Number										
Facility's Phone:											
18c. Signature of Alternate Facility (or Generator)						Signature		Month Day Year			
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)											
1. H040						2.		3.		4.	
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a											
Printed/Typed Name Don Hamilton						Signature 		Month Day Year 10/19/11			



LDR NOTIFICATION FORM

Generator Name Emerald Services Inc. - Airport Way

Manifest No. 004391191FLE

Pursuant to 40 CFR §268.7(a), I hereby notify that this shipment contains waste restricted under 40 CFR Part 268 Land Disposal Restrictions (LDR).

A. GENERAL WASTE NOTIFICATION

Form Line No.	Profile No.	EPA Waste Codes & LDR Subcategories (if any) <i>List codes or use Attachment 1</i>	NWW	WW	UHC Waste Constituent Notification <i>Check the "None" box or List Legend Constituent # or use Attachment 2</i>
1	CH144002B	D008, TSCA <input checked="" type="checkbox"/> Check if Attachment 1 has been used	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> None <input type="checkbox"/> Check if Attachment 2 has been used
2		<input type="checkbox"/> Check if Attachment 1 has been used	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> None <input type="checkbox"/> Check if Attachment 2 has been used
3		<input type="checkbox"/> Check if Attachment 1 has been used	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> None <input type="checkbox"/> Check if Attachment 2 has been used
4		<input type="checkbox"/> Check if Attachment 1 has been used	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> None <input type="checkbox"/> Check if Attachment 2 has been used
5		<input type="checkbox"/> Check if Attachment 1 has been used	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> None <input type="checkbox"/> Check if Attachment 2 has been used
6		<input type="checkbox"/> Check if Attachment 1 has been used	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> None <input type="checkbox"/> Check if Attachment 2 has been used

B. HAZARDOUS DEBRIS NOTIFICATION

- ☐ This hazardous debris, as identified above on Line No(s). _____ is subject to the alternative treatment standards of 40 CFR §268.45.
The waste contains the following contaminants subject to treatment (check all that apply):
☐ Toxicity characteristic debris ☐ Debris contaminated with listed waste ☐ Cyanide reactive debris

C. CONTAMINATED SOIL NOTIFICATION & CERTIFICATION

- ☐ This contaminated soil, as identified above on Line No(s). _____ is subject to the alternative treatment standards of 40 CFR §268.49(c).
Complete the following: "I certify under penalty of law that I personally have examined this contaminated soil & it [☐ does/ ☐ does not] contain listed hazardous waste & [☐ does / ☐ does not] exhibit a characteristic of hazardous waste & [☐ is subject to / ☐ complies with] soil treatment standards as provided by §268.49(c) or the universal treatment standards". Note: Constituents subject to treatment are any constituents listed in 40 CFR §268.48 Universal Treatment Standards that are reasonably expected to be present in any given volume of contaminated soil, except fluoride, selenium, sulfides, vanadium & zinc, & are present at concentrations greater than ten times the universal treatment standard.

D. LAB PACK (INCINERATION) NOTIFICATION & CERTIFICATION

- ☐ This lab pack, as identified above on Line No(s). _____ is subject to the alternative treatment standards of 40 CFR §268.42(c).
"I certify under penalty of law that I personally have examined & am familiar with the waste & that the lab pack contains only wastes that have not been excluded under Appendix IV to 40 CFR Part 268 & that this lab pack will be sent to a combustion facility in compliance with the alternative treatment standards for lab packs at 40 CFR §268.42(c). I am aware that there are significant penalties for submitting a false certification, including the possibility of fine or imprisonment".

E. EXTENSIONS & VARIANCES

- ☐ This waste, as identified above on Line No(s). _____ is not prohibited from land disposal & is subject to a deadline extension or variance, e.g., treatability variance, case-by-case extension. Describe below any extension or variance that applies to this waste & include applicable dates:

Generator's Authorized Signature

Name & Title (Printed or Typed)

Date

William K. Deane President MSB 10/17/11



Clean Harbors Aragonite LLC
11600 North Aptus Road
Grantsville, UT 84029
435-884-8100

10/19/2011

	UOM	Time In	Time Out
GROSS	92340 LBS		
TARE	37620 LBS		
NET	54720 LBS		

Container # or Fleet #

Load # 56448

Manifest # 004391191 FLE

Sales Order # DI3850168

Profile # CH144002B

Tracking # 25414106

Emerald Recycling Services
1500 Airport Way South
Seattle, WA 98134



Clean Harbors Aragonite LLC
11600 North Aptus Road
Grantsville UT, 84029
UTD981552177
(435) 884-8100

CERTIFICATE OF DISPOSAL

Generator Facility Name: Emerald Recycling Services
Generator Address: 1500 Airport Way South
Seattle, WA, 98134
Generator Contact Name:

Sales Order#: DI3850168
Date Received: 10/19/2011

Generator EPA ID: WAD058367152

Load #: 56448
Manifest #: 004391191FLE

Original CH ID #	Date Removed From Service	Unit Type	Serial # / Customer ID	Material Description	Disposal Date	Method of Disposal	Disposal Facility
25414106	10/17/2011	CM	25414106 /	High Btu PCB Liquids For Incineration	11/12/2011	Incineration	Aragonite, UT Facility

Under Civil and Criminal Penalties of Law for the making or submission of false or fraudulent statements or representations (18 U.S.C. 1001 and 15 U.S.C. 2615), I certify that the information contained in or accompanying this document is true, accurate, and complete. As to the identified section(s) of this document for which I cannot personally verify truth and accuracy, I certify as the company official having supervisory responsibility for the persons who, acting under my direct instructions, made the verification that this information is true, accurate, and complete.

Authorized Agent

Tuesday, November 15, 2011

Date